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	- <b>-</b>	CRI	F ors Co	prrected by th	STIC Syster	Branch CRF Processing	Date:	9/9/9
	ndor: nangeda	file from no	on-ASCII to AS	SCII		Edited by:	$\overline{Z}$	ME(S
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				section with the a on data; or  otl	actual current nun her	nber. The numb	er inputte	ed by the
Add	ded the r	nandatory l	neading and s	subheadings for "(	Current Application	on Data".		
Edit	ited the "	Number of	Sequences" f	ield. The applica	nt spelled out a n	umber instead o	f using a	n integer.
Cha	anged th	e spelling o	f a mandatory	y field (the headin	ngs or subheading	s), specifically:		
Con	rrected th	ne SEQ ID I	NO when obv	iously incorrect.	The sequence nu	mbers that were	edited w	vere:
Inse	erted or o	corrected a	nucleic numb	er at the end of a	nucleic line. SE	Q ID NO's edite	d:	
		• •		•	t be on the same is was moved to		•	. If the
appl	olicant pla	iced a resp	onse below th	ne subheading, th		its appropriate p	•	. If the
inse	olicant pla	ons after h	onse below the	ne subheading, th	is was moved to	its appropriate p	•	. If the
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<sup>\*</sup>Examin r: Th abov corrections must b communicated to th applicant in th first Offic Action. DO NOT send a copy of this form.

3/1/95

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/876,132

DAT**ECHOLOUS** 1600/2900 TIME: 10:17:14

INPUT SET: S28494.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

1		SEQUENCE LISTING ENTERED
2 3	(1)	General Information
3 4	(1)	General information
5 6		(i) APPLICANT: Fowler, Timothy Stuart, Causey
7 8 9		(ii) TITLE OF THE INVENTION: ENTEROBACTERIACEAE FERMENTATION STAINS
10 11 12		(iii) NUMBER OF SEQUENCES: 3
13		(iv) CORRESPONDENCE ADDRESS:
14		(A) ADDRESSEE: Genencor International, Inc.
15		(B) STREET: 925 Page Mill Road
16		(C) CITY: Palo Alto
17		(D) STATE: CA
18		(E) COUNTRY: US
19		(F) ZIP: 94304-1013
20		
21		(V) COMPUTER READABLE FORM:
22		(A) MEDIUM TYPE: Diskette
23		(B) COMPUTER: IBM Compatible
24		(C) OPERATING SYSTEM: DOS
25		(D) SOFTWARE: FastSEQ for Windows Version 2.0
26		
27		(vi) CURRENT APPLICATION DATA:
28		(A) APPLICATION NUMBER: 08/876,132
29		(B) FILING DATE: 23-JUN-1997
30		
31		(vii) PRIOR APPLICATION DATA:
32		(A) APPLICATION NUMBER:
33		(B) FILING DATE:
34		
35		(viii) ATTORNEY/AGENT INFORMATION:
36		(A) NAME: Glaister, Debra J.
37		(B) REGISTRATION NUMBER: 33,888
38		(C) REFERENCE/DOCKET NUMBER: GC372
39		
40		(ix) TELECOMMUNICATION INFORMATION:
41		(A) TELEPHONE: 650-846-7620
42		(B) TELEFAX: 650-845-6504
43		
44		
45		(2) INFORMATION FOR SEQ ID NO:1:
46		

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/876,132

TIME: 10:17:15

DATE: 09/16/98

INPUT SET: S28494.raw

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48
              (B) TYPE: nucleic acid
49
             (C) STRANDEDNESS: single
50
             (D) TOPOLOGY: linear
51
52
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
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54
55
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80
                                                                          1560
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83
84
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85
86
           (i) SEQUENCE CHARACTERISTICS:
87
              (A) LENGTH: 1847 base pairs
88
              (B) TYPE: nucleic acid
             (C) STRANDEDNESS: single
89
             (D) TOPOLOGY: linear
90
91
92
93
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#### TECH CENTER 100

DATE: 09/16/98

PAGE: 3

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/876,132

TIME: 10:17:17 INPUT SET: S28494.raw GTCTTGTAAT CAAGTTGGTC AGAACTCGAT TACGATTTGT AAGTAGAAAT CTAACTCACA TTTCGCAGAA AGTCAAACTT ACCTCTTAGT TACAACTCAA AAATTTCCTA GCCTTTTCAG ATCCTTAAGC ATACATATTT TGTTTAAACC GATTGTGTCC GGTGTTTGGT GTGGAGCCAT TGATCCGAGT GGTCAATATG TGATTGTTCG CCAAACAGTG TATGTAGGTC TAAACGGGGA GTGCTACAAA AGACCATACC CGAAACGAGT GCCTAAGTGT TTTGGTTATC AACCAGGTAA GCTATGAGAA AGCCCAGCCA TAAATGGGGT TAGGTTGAAG CAAGTCTTCA TATGGTGCGA CACAAGGGT GTAGTAGGT GTCGTCAAAC TGAAAGGTTT GATAGCTCTA AGCTTGTGCT TCTGTGGGTC AAGCCTCAAG TGCTGATCTG TGGTGTCGTC TACCTGATAA CTTTCACTTT 7.80 TTCGAGTGAA ATTCAGGAGG CGAAACTATG GGTCAAGCCC AGCTTTGCTG GGGTTCGGCA CATCCAGCTT ACAGCATTGG TGCTCTTGCG AAGCTGAAGC ACAAAAATCT AATCCAGGGT TTGGGTTTTT TATACCAGAA GCAAAACAAA AAAATAAAAC AAAGAAAAAT TTTCGAGCGA AAAAATATTT TGGAATTTTT TAAAGGCGAT ACTTGCTACC GCACTTTTGC CATATTTAAA ACCTGACTAT CTTTATAAGT TAATAGATAT ATCCGTTAGA TTATAAAGTA TGTTAAAAAC GAGTAAAAAC AATAACTTAT ATATTTAATT CTGAATTATA TTTGACAGTG ATTATTTAAT ATATTAAGAG ATATATCTAT TAGCTTAAAT ATAACTAAAA AAAGAGGTAA ATATATGGAT TGTGTATTTA AAAAAGCATT AGAAAATGAA ATAGAACATT ATAAAAAAGA CGGTGATATC ANATCTTTCT TACAATACTT GCATTACTTT GATATAGATA AAGCATTAAA TGGTGATGAA TGTGGCGATA TTATAAACTC AAATTTATCC ATTGATGAAA GTTTTGATCT TCTTGATGTT GAGCACAATT TCGGCTGGGC TTTCAATAAA ATAATACAGA GACGAAATGA ATATTTATCA TCAGCTAAAA CTGAAAATGA TTTTAAAAAA TACTCGTTCT TTATTCATTC GATCAATTGG GAAGAATTTA ATTACGATGA GATGAGTACA ATACATCAAG AAATGATTAA AGGATTAGAT AATTACACAT ATGGAGAAAT AACCATATGA ATAATAAAAT AAGAGAATAT ATTGATTTCG AAATAACAAA AGATATAAAA GAAAGTCAGC TCTTAAAAAT ATCTGCATTG ATCGATGTTT TAAAAGTAGA TGAAAAATTT ATTGATGAAG AGGATTTGCA ACTAAAGATA TTGAAAATAT CGTATGAAAA TCCTATTGAT GATCCAGATG ATGGCATAAG AAAATCACAA TTCGCACGAA GAAATGCCTA TGCTTTCCGC ATTAAAAAAA CAAGCAAAAA GAGATCT (2) INFORMATION FOR SEQ ID NO:3: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 371 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3: Asn Phe Leu His Trp Lys Phe Glu Lys Ile Arg Gln Lys Lys Leu Lys Trp Lys Lys Tyr Tyr Lys Lys Arg Arg Ser Asp Met Asp Phe Lys Ser Arg Lys Leu Thr Leu Asn Glu Lys Lys Asp Leu Glu Lys Ile Tyr 

Ala Glu Ser Glu Leu Lys Ala Lys Lys Leu Gly Thr Gln Pro Gly Val

Val Leu Glu Met Thr Met Lys Glu Met Met Lys Asn Ile Asn Leu Asp

Val Asn Glu Glu Thr Ala Gly Gln Tyr Arg Lys Leu Phe Lys Asn Lys

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/876,132

INPUT SET: S28494.raw

DATE: 09/16/98 TIME: 10:17:19

153					85					90				INF	<i>PUT S</i> 95	ET: S
154																
155	Val	Glu	His	Ser	Lys	Ser	Asp	Asp	Leu	Val	Thr	Glv	Leu	Leu	Glu	Cvs
156				100	- 4		-	•	105			-		110		•
157																
158	Gly	Thr	Arg	Asn	Ser	Phe	Asp	Lys	Thr	Arg	Ser	Ala	Phe	Arg	Phe	Cys
159	-		115				-	120		•			125			-
160																
161	Ile	Cys	Glu	Arg	Ile	Gln	Gln	Leu	Arg	Lys	Glu	Ala	Asp	Asn	Ala	Arg
162		130					135					140				
163																
164	Arg	Val	Lys	Asp	Phe	Asp	Thr	Met	Lys	Ala	Lys	Thr	Lys	Glu	Ala	Phe
165	145					150					155					160
166	_				_	_							_			_
167	Glu	Leu	Ser	Phe	Val	Phe	Asp	Lys	Asp		Leu	Ser	Glu	Asn	_	Ile
168					165					170					175	
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170	GIN	Trp	Asn	_	тте	ser	HIS	Asn	_	гÀг	Asp	ser	АТА		гàг	Arg
171				180					185					190		
172 173	T ***	mh	Wat	T	a1.,	<b>3</b> 1 0	<b>3</b> a n	mb~	Wat	X a.s.	) an	Tla	Dho	Tura	X ra	Leu
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175			133					200					203			
176	T.vc	λan	Δsn	T.vs	Ser	Thr	ηυr	Asn	Ara	Tur	Δla	Glv	Phe	T.e.11	Ser	Ile
177	טעט	210	AUII	טעם	DCI		215	upp	9	-1-	774	220	1 110	100	501	
178																
179	Cvs	Ser	Ile	Thr	Glv	Cvs	Arg	Pro	Ala	Glu	Val	Leu	Lvs	Glv	Ile	Glu
180	225				1	230	5				235		-1-	2		240
181																
182	Ile	Val	Arg	Asn	Arg	Tyr	Glu	Asp	Gly	Ile	Ser	Phe	Lys	Ile	Leu	Gly
183			_		245	_		_	_	250			_		255	
184	Ala	Lys	Val	Gly	Asn	Asp	Arg	Gly	Gln	Ser	Glu	Arg	Thr	Leu	His	Phe
185				260					265					270		
186																
187	Asp	Leu		Lys	Tyr	His	Asp		Glu	Gln	Met	Asn	_	Ile	Leu	Ser
188			275					280					285			
189	<b>41.</b>	<b>.</b>	<b>T</b>			<b>T</b>	Dla a	nh -	m	T	D	3	<b>a</b> 1	T	T	<b>M</b>
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194	305	Ser	Leu	ALG	GIII	310	nea	ıyı	TTE	GIII	315	AIG	1111	FIIE	Ser	320
195	303					310										320
196	Tvr	Thr	Leu	Ara	His	Ara	Val	Ala	Ser	Asp	Leu	Lvs	Ala	Ser	Glv	Ala
197	- 4 -			3	325	5				330		-1-			335	
198																
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200	•	_		340					345	-				350		
201																
202	Gln	Glu	Leu	Leu	Arg	Leu	Cys	Ser	Phe	Val	Xaa	Arg	Trp	Tyr	Arg	Cys
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205	Asn	Trp	Cys													

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/876,132

DATE: 09/16/98 TIME: 10:17:20

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206 370 207

208 209

## **SEQUENCE VERIFICATION REPORT** PATENT APPLICATION *US/08/876,132*

DATE: 09/16/98 TIME: 10:17:20

INPUT SET: S28494.raw

Line

Error

Original Text

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/876,132

DATE: 09/09/98 TIME: 15:03:05

INPUT SET: S28494.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

1		SEQUENCE LIST	ING
2 3 4	(1)	General Information	Does Not Comply Corrected Diskette Needed
5 6 7		(i) APPLICANT: Fowler, Timothy Stuart, Causey	Collected Press
8 9 10		(ii) TITLE OF THE INVENTION: ENTEROBACT STAINS	ERIACEAE FERMENTATION
11 12		(iii) NUMBER OF SEQUENCES: 3	
13		(iv) CORRESPONDENCE ADDRESS:	
14		(A) ADDRESSEE: Genencor International	, Inc.
15		(B) STREET: 925 Page Mill Road	
16		(C) CITY: Palo Alto	
17		(D) STATE: CA	
18		(E) COUNTRY: US	
19		(F) ZIP: 94304-1013	
20			
21		(v) COMPUTER READABLE FORM:	
22		(A) MEDIUM TYPE: Diskette	
23		(B) COMPUTER: IBM Compatible	
24		(C) OPERATING SYSTEM: DOS	
25		(D) SOFTWARE: FastSEQ for Windows Ver	sion 2.0
26	٠.	-	
27		(vi) CURRENT APPLICATION DATA:	
28		(A) APPLICATION NUMBER: 08/876,132	
29		(B) FILING DATE: 23-JUN-1997	
30			
31		(vii) PRIOR APPLICATION DATA:	•
32		(A) APPLICATION NUMBER:	
33		(B) FILING DATE:	
34		• •	
35		(viii) ATTORNEY/AGENT INFORMATION:	
36		(A) NAME: Glaister, Debra J.	
37		(B) REGISTRATION NUMBER: 33,888	
38		(C) REFERENCE/DOCKET NUMBER: GC372	
39		• •	
40		(ix) TELECOMMUNICATION INFORMATION:	
41		(A) TELEPHONE: 650-846-7620	
42		(B) TELEFAX: 650-845-6504	
43		. ,	
44			
45		(2) INFORMATION FOR SEQ ID NO:1:	
46		~	

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/876,132

INPUT SET: S28494.raw

DATE: 09/09/98

TIME: 15:03:05

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47
           (i) SEQUENCE CHARACTERISTICS:
48
              (A) LENGTH: 1660 base pairs
49
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: single
50
             (D) TOPOLOGY: linear
51
52
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
5.3
54
55
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                                                                          1380
78
     GGAAGCTCTA CAACAGCTTG AGGCAATACC TCTACATCCA ACATAGAACG TTTTCACTGT
                                                                           1440
     ATACACTTCG TCACAGGGTT GCGAGTGATC TCAAGGCATC CGGTGCAGAT GACTTCACCA
79
                                                                           1500
     TAGCGGCTNT TTTGGGTCAC AGAGTGACTC AAAGCCAGGA GTTACTACGG CTATGCTCGT
80
                                                                           1560
     TCGTCGNAAG GTGGTATCGC TGTAACTGGT GTTGAGTGCT CTGATGTTGT GAAAGCAAAC
81
                                                                          1620
     AAGAGTCAGT TNGCTGTATC AAGGACTCCG AGCCAGATCT
82
                                                                          1660
83
84
               (2) INFORMATION FOR SEQ ID NO:2:
85
86
           (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 1847 base pairs
87
88
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: single
89
90
             (D) TOPOLOGY: linear
91
92
93
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
94
95
     AGATCTCAAC CAGTTTAAAA TCGCACTTCA AGAAGTAAAA ATAGGGGCCG GCACCGGCTC
                                                                             60
     TTTTTTTGGT GTTTTTGTAG TTAGTGGATA TATCTGTTAG CTACAGAGAA AAGCGATTTT
96
                                                                            120
     AGAGGGTTTG ACGAGGTTTT TTCGAGCTAT CCAGGGTTTT TGGGTTTTTG GGGTTGGATC
97
                                                                            180
98
     AGAAAAGTCG TTCAAGATTA TTGACATAAA GACAGGAAGG TTTATAACAA GTACCAGATA
99
     CGACAAAACC AGCTTTGCAG GCTGGCTTTG AAGGACTAAA AGAAGTGGGG ACTTCTTTGA
```

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/876,132

DATE: 09/09/98

TIME: 15:03:06

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Val Leu Glu Met Thr Met Lys Glu Met Met Lys Asn Ile Asn Leu Asp

Val Asn Glu Glu Thr Ala Gly Gln Tyr Arg Lys Leu Phe Lys Asn Lys

## RAW SEQUENCE LISTING PATENT APPLICATION . US/08/876,132

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153					85					90					95	
154																
155	Val	Glu	His	Ser	Lys	Ser	Asp	Asp	Leu	Val	Thr	Gly	Leu		Glu	Cys
156				100					105					110		
157	_											_	_		_	
158	Gly	Thr	_	Asn	Ser	Phe	Asp	_	Thr	Arg	Ser	Ala		Arg	Phe	Cys
159			115					120					125			
160	_		_			_	_				_					_
161	Ile	_	Glu	Arg	Ile	Gln	Gln	Leu	Arg	Lys	Glu		Asp	Asn	Ala	Arg
162		130					135					140				
163	_		_			_			_		_		_			
164	_	Val	Lys	Asp	Phe	_	Thr	Met	Lys	Ala	_	Thr	Lys	GLu	Ala	
165	145					150					155					160
166		_	_	_,		_,		_	_		_	_		_		
167	GLU	Leu	Ser	Phe		Pne	Asp	Lys	Asp		Leu	ser	GIU	Asn	_	тте
168					165					170					175	
169	a1	m	3	1	<b>T1</b> -	<b>~~</b>	774	<b>.</b>	F	T	3	a	37-	C	T	<b>3</b>
170	GIN	Trp	Asn	_	TTE	Ser	His	Asn	_	ràs	Asp	ser	Ата		гÀг	Arg
171				180					185					190		
172 173	T	mb	Wa+	T ***	a1	3 T a	<b>1</b> ~ ~	mb	Va+	3 ~ ~	7 ~~	T1.	Dho	F	λ~~	Leu
174	гуѕ	1111	195	гåр	GIU	АТа	ASP	200	Met	ASP	ASP	TTE	205	гåг	ALG	пеп
175			193					200					205			
176	T 170	Acn	λen	T 170	Sor	Th r	Фит	λen	λra	miz r	λla	Cl v	Dhe	T.611	Sar	Ile
177	гур	210	ASII	гуъ	Ser	1111	215	АБР	AIG	ıyı	мта	220	FILE	neu	Ser	TTE
178		210					213					220				
179	Cvs	Ser	Tle	Thr	G] v	Cvs	Arg	Pro	Δla	Clu	Val	T.em	L.vs	Glv	Tle	Glu
180	225			••••	O-3	230	9		n_u	014	235		-,-	013		240
181																
182	Ile	Val	Ara	Asn	Ara	Tvr	Glu	Asp	Glv	Ile	Ser	Phe	Lvs	Ile	Leu	Glv
183			5		245	- 2 -		<u>-</u> -	1	250			-1		255	1
184	Ala	Lvs	Val	Glv		qsA	Arg	Glv	Gln		Glu	Ara	Thr	Leu		Phe
185		4		260		•		4	265					270		
186																
187	Asp	Leu	Ser	Lys	Tyr	His	Asp	Asn	Glu	Gln	Met	Asn	Tyr	Ile	Leu	Ser
188	-		275	_	_		_	280					285			
189																
190	Gln	Leu	Lys	Asp	Asn	Lys	Phe	Phe	Tyr	Lys	Pro	Asp	Gly	Lys	Leu	Tyr
191		290					295					300				
192																
193		Ser	Leu	Arg	Gln	-	Leu	Tyr	Ile	Gln	His	Arg	Thr	Phe	Ser	
194	305					310					315					320
195		_					_	_					_		_	_
196	Tyr	Thr	Leu	Arg		Arg	Val	Ala	Ser		Leu	Lys	Ala	Ser	_	Ala
197					325					330					335	
198		_	-1	-m1	2				_	~7		_		-1	<b>~</b> 7	~
199	Asp	Asp	Phe		Ile	ATa	Ala	Xaa		GTÀ	His	Arg	va⊥		GIn	Ser
200				340					345					350		
201	a1	a7	T	T	<b>3</b>	T	<b>a.</b>	O c	Dl	12.7	V	N	m	M	<b>3</b>	<b>a.</b>
202	GIN	GIU		ьeu	arg	ьeu	Cys		rne	vaı	хаа	arg	_	Tyr	arg	cys
203			355					360					365			
204 205	A ~~ ~	mr~	C***													
203	HOII	Trp	Cys													

## RAW SEQUENCE LISTING PATENT APPLICATION , US/08/876,132

DATE: 09/09/98 TIME: 15:03:10

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206 370 207 208 (19)

# SEQUENCE VERIFICATION REPORT PATENT APPLICATION . US/08/876,132

DATE: 09/09/98 TIME: 15:03:10

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Original Text